

A CONTRIBUTION TO THE FLORA OF MANIPUR¹

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The paper describes 49 genera and 53 species of flowering plants reported as new records for the State of Manipur. It also gives a list of 13 Cryptogams recently collected from Manipur. The collection of *Platyserium wallichii* from forests of Manipur appears to be the first report of its occurrence within India.

The only noteworthy work on the Botany of Manipur State is by Deb (1961), who collected intensively in this region and published a list of 2007 taxa of flowering plants.

The present work is based on authors own collections in Manipur during April-May, 1975. The grasses have been described elsewhere.

Platyserium wallichii commonly called the 'Stag-horn fern' which is earlier reported from Malay Peninsula and Tenasserim has been collected from Moreh, on the border of Burma, well within Indian territory. It is fairly common as epiphyte and is being reported here for the first time from India. *Andrographis*, *Evolvulus*, *Grangea*, *Holarrhena*, *Mosla*, *Pongamia*, *Sonchus*, *Sparaganium*, *Sphaeranthus*, *Stachytarpheta* and *Wrightia* are new genera for the State.

In the following enumeration, species are arranged alphabetically under their respective families which are also listed alphabetically. For each species precise locality, date of collection and field number have been given. Field numbers without collectors name are all collections of *Shukla*. Altitude of the locality, name of plants in Manipuri language and local uses, when available are provided.

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PHANEROGAMS

ACANTHACEAE

***Andrographis ovata* Benth.**

Herb, flowers whitish.

Only one plant seen.

Moreh, 8.5.1975, 63678.

AMARANTHACEAE

***Alternanthera philoxeroides* (Mart.) Griseb.**

Creeping and trailing herb, stem hollow, inflorescence silvery white.

Very common in water, wasteland and in marshes in and around Keibul. Apparently this species is not used locally. In Meghalaya, however, it is used as a leaf vegetable. Keibul Lamjao, on floating island (750 m), 26.4.1975, *Jain* 63320; Keibul (750 m), 28.4.1975, *Jain* 63389; Near Logtak (750 m), 29.4.1975, *Jain* 63453.

This species is a native of Brazil and seems a very recent introduction and now naturalised in various places.

***Alternanthera repens* (Linn.) O. Ktze.**

Trailing herb, inflorescence white.

Growing on marsh and gravelly soil.

Logtak, Tongbram village (750 m), 29.4.1975, *Jain* 63451.

The species is a native of America but now naturalised in many parts of India. Its first report in India was from near a railway line on Monkey hill plateau in Khandala

ghats. Subsequently collected in eastern India in 1941 and 1957.

AMARYLLIDACEAE

Crinum amoemum Roxb.

Herb about 50 cm tall, flowers white in terminal whorl. In large numbers in a shady place on a hillock. Tipaimukh road, Mission compound (1350 m), 6.5.1975, 63650.

APOCYNACEAE

Holarrhena antidysenterica (Linn.) Wall. ex DC.

Small tree upto 2 m high. Flowers white, scented.

Moreh, 8.5.1975, 63674.

Wrightia tomentosa (Roxb.) R. et S.

About 7 m tall tree. Flowers pale yellow, scented.

In roadside ravine.

Moreh, Indo-Burma road, 9.5.1975, 63727.

ASTERACEAE

Erigeron bonariensis Linn.

Herb upto 45 cm tall.

Not common.

Tongbram village, Near Logtak Lake (750 m), 29.4.1975, Jain 63469.

Grangea maderaspatana (Linn.) Poir. *Local name*: 'Laibongon'.

Herb, inflorescence yellow.

Very common on roadside. Decoction used for giving bath in case of Eczema and other skin diseases.

Keibul, on way to floating island (750 m). 26.4.1975, Jain 63314.

Lactuca gracilis DC.

Churachandpur, Tipaimukh road (1250 m). 2.5.1975, 63546; Ngaram village, near Thanga (750 m), 29.4.1975, Jain 63458.

Sonchus asper (Linn.) Hill *Local name*: 'Khomthopi'.

Herb upto 60 cm tall, ray-florets white.

Keibul, in moist places (750 m), 28.4.1975, Jain 63441.

Sonchus wightianus DC. subsp. **wightianus** DC.

Small rosette herb with glabrous stem, inflorescence yellow.

Churachandpur, Tipaimukh road (1250 m), 2.5.1975, 63554.

Sphaeranthus indicus Linn.

Spreading herb. Very common in wastelands.

Keibul (750 m), 28.4.1975, Jain 63397.

BORAGINACEAE

Heliotropium ovalifolium Forsk.

Low prostrate herb, flowers white, seeds black. Common in open fields in damp patches.

Churachandpur, Tipaimukh road (1250 m), 2.5.1975, 63548.

COMMELINACEAE

Commelina appendiculata C.B. Cl.

Small herb, flowers blue, bracts villous. Not common.

Churachandpur, behind Beat Office (1260 m), 2.5.1975, 63563.

CONVOLVULACEAE

Evolvulus nummularis Linn.

Creeping herb, flowers white. Very common on roadside.

Moreh, Indo-Burma road, 9.5.1975, 63722.

CYPERACEAE

Cyperus brevifolius (Rottb.) Hassk.

Small sedge. Common near stream.

Seprameina, 12.5.1975, 63785.

Verma (1971) reported it from all regions in eastern India except Manipur.

Fimbristylis aestivalis (Retz.) Vahl *Local name*: 'Kankhanchabei'.

A very variable species, 15 - 40 cm tall. Common in marshy places and floating island.

Keibul (750 m), 26.4.1975, *Jain* 63311; Keibul Lamjao, 27.4.1975, *Jain* 63378 & 63379.

Verma (1971) does not report it from Manipur.

EUPHORBIACEAE

Croton bonplandianum Baill.

Herb upto 75 cm tall, male flowers white. Common in wasteland and roadside. Imphal-Dimapur road (795 m), 11.5.1975, 63747.

Euphorbia hirta Linn. *Local name*: 'Pakhamba-maton'.

Trailing herb, inflorescence pedunculate. Logtak - Tongbram village (750 m), 29.4.1975, *Jain* 63490.

LABIATAE

Mosla ocymoides Buch. - Ham. ex Benth.

Small herb, flowers violet. Common in roadside nala. Churachandpur, near Churachandpur College (1250 m), 1.5.1975, 63536.

LAURACEAE

Beilschmiedia brandisii Hook. f.

Tree upto 7 m tall, fruits dark violet. Not common. Koubru Leikha, 12.5.1975, 63794.

LYTHRACEAE

Ammannia multiflora Roxb.

Small herb, entire plant purplish. Common

in moist places and dried-up paddy fields. Churachandpur, Tipaimukh road 2 Km (1250 m), 2.5.1975, 63556; Seprameina, 12.5.1975, 63792.

MIMOSACEAE

Acacia farnesiana Willd. *Local name*: 'Chingonglei'.

Inflorescence yellow, fruits 7-10 cm long. Common. Powder of seeds with water used in Cholera.

Near Logtak Lake (750 m), 29.4.1975, *Jain* 63449; Imphal-Dimapur road, 1 Km (795 m), 11.5.1975, 63758.

Albizzia odoratissima Benth. *Local name*: 'Uin'.

Tree in buds.

Tongbram village, near Logtak Lake (750 m), 29.4.1975, *Jain* 63447.

MORACEAE

Maclura cochinchinensis (Lour.) Corner

Scandent spiny shrub, 4-5 m tall in the ravines. Rare.

Churachandpur, near Horticultural Sub-Station (1250 m), 4.5.1975, 63614.

MYRSINACEAE

Ardisia solanacea (Poir.) Roxb.

Shrub upto 4 m tall, flowers white to light or dark purple. Common along river bank. Moreh, 8.5.1975, 63710 & 63711.

MYRTACEAE

Syzygium formosum (Wall.) Masamune

Tree about 10 m tall. Moreh, 8.5.1975, 63709.

Syzygium griffithii (Duthie) Merr. & Parry.

Tree about 5 m tall. Common in rocky soil. Fruits edible.

Moreh, 8.5.1975, 63676.

ONAGRACEAE

Epilobium angustifolium Lamk.

Small herb, flowers yellow. On road side. Saikot village (1450 m), 5.5.1975, 63622.

ORCHIDACEAE

Cirrhopetalum guttulatam Wall. ex Hook. f.

Epiphytic on *Albizia* sp., flowers purple. Rare.

Tipaimukh road, 11 km (1350 m), 6.5.1975, 63655.

Coelogyne graminifolia Par. & Reichb. f.

Herb hanging down from rocks, in fruits. Not common.

Moreh, 8.5.1975, 63687.

Coelogyne suaveolens Hook. f.

Epiphytic herb, flowers white. Common.

Moreh, 8.5.1975, 63698.

Dendrobium williamsonii Day et Reichb. f.

Epiphytic herb, flowers white. Common.

Moreh, 8.5.1975, 63693.

Eria fragrans Reichb. f.

Epiphytic herb, fruits green, elongated. Common inside the forest.

Moreh, 8.5.1975, 63701.

Geodorum densiflorum Schlechter

Terrestrial herb, flowers white. Not Common.

Saikot (1450 m), 5.5.1975, 63646.

Renanthera imschootiana Rolfe

Epiphytic herb, flowers deep red.

Stated to be common in Koubru forest.

Imphal-Dimapur road, 11 km, Orchid nursery (795 m), 11.5.1975, 63776.

Sarcanthus filiformis Lindl.

Epiphytic herb on *Ficus* sp., flowers small, purplish. Not common.

Maullum (1375 m), 3.5.1975, 63590.

PAPILIONACEAE

Pongamia pinnata (Linn.) Pierre

Road side tree upto 10 m high, flowers light purple. Possibly introduced.

Imphal-Dimapur road, 7 km (795 m), 11.5.1975, 63760.

POLYGONACEAE

Polygonum hydropiper Linn.

Herb upto 50 cm tall, flowers white. Growing on marshy places.

Logtak-Tongbram village (750 m), 29.4.1975, *Jain* 63492.

Rumex maritimus Linn. *Local name*: 'Torong-khonchak'.

Herb, fruiting perianth armed as well as unarmed.

Common on road side. Leaves applied on Ring worm infection.

Keibul Lamjao (750 m), 26.4.1975, *Jain* 63327.

POTAMOGETONACEAE

Potamogeton octandrum Poir.

Aquatic floating herb. Common.

Thanga-Logtak (750 m), 29.4.1975, *Jain* 63456.

PRIMULACEAE

Lysimachia javanica Bl.

Annual herb, about 75 mm tall, flowers white. Common in moist places.

Churachandpur-Imphal road, 2 km (1250 m). 4.5.1975, 63601.

RUBIACEAE

Canthium gracilipes Kurz. *Local name*: 'Heibi'.

Small tree in young fruits. Not common.
Keibul (750 m), 28.4.1975, Jain 63401.

Wendlandia coriacea DC.

Shrub upto 2.5 m tall, inflorescence dried-up. Growing on hill slopes.
Saikot (1450 m), 5.5.1975, 63631.

SOLANACEAE

Datura suaveolens Willd. *Local name*: 'Sa-
vaidak'.

Herb upto 1.5 m tall, flowers white.
Common in wasteland.
Imphal-Dimapur road, 10 Km. (795 m),
11.5.1975, 63762.

Solanum khasianum C.B.Cl. *Local name*:
'Singkhaga'.

Prickly herb, fruits 2.5 cm diameter, yellow.
Fruits were seen being fed to captive bark-
ing deer.
Keibul Lamjao (750 m), 26.4.1975, Jain
63339.

TILIACEAE

Grewia elastica Royle

Shrub; petals dull white, stamens yellow.
Common on hill slopes.
Saikot (1450 m), 5.5.1975, 63642.

Grewia sapida Roxb.

Low herb, branching from the base. Com-
mon. Ripe fruits edible.
Keibul, behind Forest Office (750 m),
30.4.1975, 63521.

Triumfetta rhomboidea Jacq.

Shrub about 75 cm tall, flowers small, yel-
low. Common in open fields.
Churachandpur, near Horticultural Sub-
Station (1250 m), 4.5.1975, 63603.

TYPHACEAE

Sparaganium simplex Huds.

Tall herb. Not common.

Keibul Lamjao (750 m), 26.4.1975, Jain
63324.

VERBENACEAE

Clerodendrum viscosum Vent.

Shrub upto 2 m high, calyx red, fruits black.
Common on road side.
Moreh, 8.5.1975, 63670.

Stachytarpheta indica Vahl

Herb upto 1 m tall, flowers white. Com-
mon on road side.
Seprameina, 12.5.1975, 63781.

ZINGIBERACEAE

Curcuma zedoaria Rosc.

Herb in inflorescence, bracts red, flowers
yellow, anthers tailed. Common.
Churachandpur, behind Beat House (1260
m), 30.4.1975, 63522; Muallum (1375 m),
3.5.1975, 63576.

CRYPTOGAMS

CYCADACEAE

Cycas pectinata Griff.

Woody shrub on hill slope. Rare.
Keibul, behind Forest Beat Office (750 m),
30.4.1975, 63805.

EQUISETACEAE

Equisetum debile Roxb. ex Vancher

Erect rhizomatous herb, 20 cm—1 m tall.
Not common. Occassionally met with in
moist shady places.
Moreh, 8.5.1975, 63712; Imphal-Dimapur
road, 1 Km (795 m), 11.5.1975, 63774.

LYGODIACEAE

Lygodium japonicum (Thunb.) Sw.

Herb, growing on hill slopes. Not common.

MARSILEACEAE

Marsilea minuta Linn.

Aquatic herb in roadside ditch. Not common.

Keibul, near Wild Life Office (750 m), 30.4.1975, 63499.

Marsilea minuta Linn. var. **indica** Gupta

Herb about 5 cm tall in sporocarp. Abundant in dried up road side depression. Growing in patches forming a continuous mat.

Imphal-Dimapur road (795 m), 11.5.1975, 63764.

POLYPODIACEAE

Platycterium wallichii Hook. 'Stag-horn fern'

Epiphytic, fronds dichotomously forked, hanging downwards, sori at the under-surface of the fork. Fairly common.

Moreh, 8.5.1975, 63668.

Panigrahi (1961) stated that this taxon is likely to occur in eastern India. He cited Beddome (1883) where distribution is shown as Malay Peninsula, Tenasserim. The present collection from Moreh, is therefore, a new record for India.

Pyrrhosia nuda (Gies.) Ching

Herb, erect or hanging down from rocks and trees, sori marginal. Very common.

Moreh, 8.5.1975, 63681.

PTERIDACEAE

Pteridium aquilinum (Linn.) Kuhn

Herb upto 1 m tall on rocky soil. Not common.

Keibul, behind Beat Office (750 m), 30.4.1975, 63518.

Pteris cretica Linn.

Herb upto 75 cm tall, sori continuous and marginal. Not common.

Churachandpur, behind Beat Office (1276 m), 2.5.1975, 63564.

Pteris quadriaurita Retz.

Herb upto 1.5 m tall, sori marginal. Rare. Muallum (1375 m), 3.4.1975, 63572.

Sphenomeris chinensis (Linn.) Maxon var. **tenuifolia** (Sw.) N. C. Nair.

Common on road side hill slopes.

Imphal-Dimapur road (795 m), 11.5.1975, 63757.

SALVINIACEAE

Salvinia nutans Hoffm.

Small floating herb, leaves glandular, small. Not common.

Keibul Lamjao (750 m), 2.4.1975, Jain 63373.

SELAGINELLACEAE

Selaginella amblyphylla Alston

Herb. Common on road side hill slopes.

Koubru-Leikha, 12.5.1975, 63798.

In spite of the work of Deb (1961) and present additional records, Manipur must be considered as an underexplored state. Further intensive work may bring to light many hitherto unreported species. Even species new to science may be expected.

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